

1-35. (Canceled)

36. (Currently Amended) A system for detecting the presence of an active connection to a data transmission network, including a network medium, to a computing device, the system comprising:

means for establishing a connection to the network medium;

means for comparing any signal found on the network medium to a predetermined standard; and

means for signaling ~~the~~ a computing device when any signal found on the network medium is an active network signal; and

wherein the network medium comprises a positive signal electrical conductor and a negative signal electrical conductor and the means for comparing any signal found on the network medium to a predetermined standard compares the signals regardless of the connection orientation of the positive signal electrical conductor and the negative signal electrical conductor.

37. (Previously Presented) A system as defined in claim 36 wherein the means for establishing a connection to the network medium comprises:

means for receiving the signal;

means for providing electrical isolation; and

means for providing a DC bias.

38. (Original) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises:

means for providing a reference voltage; and

means for comparing the signal to the reference voltage.

39. (Original) A system as defined in claim 36 wherein the predetermined standard comprises a DC reference voltage.

40. (Previously Presented) A system as defined in claim 36 further comprising a network adapter card and wherein the means for establishing a connection to the network medium, the means for comparing any signal found on the network medium to a predetermined standard; and the means for signaling the computing device are all located on the network adapter card.

41. (Original) A system as defined in claim 40 wherein the network adapter card comprises a PC Card.

42. (Original) A system as defined in claim 40 wherein the network adapter card is located within the computing device.

43. (Original) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator.

44. (Original) A system as defined in claim 36 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

45. (Previously Presented) A system as defined in claim 36 wherein the means for establishing a connection to the network medium and the means for comparing any signal found on the network medium to a predetermined standard do not significantly load the network medium when connected thereto.

46. (Original) A system as defined in claim 36 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises a output shaping circuit providing an output signal indicating when an active network signal is present on the network medium.

47. (Original) A system as defined in claim 36 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises an output shaping circuit having an RC time constant of about 0.1 ms.

48. (Original) A system as defined in claim 36 wherein the data transmission network complies to an Ethernet network standard.

49. (Original) A system as defined in claim 36 wherein the network medium comprises twisted pair cable.

50. (Original) A system as defined in claim 36 wherein the network medium comprises coaxial cable.

51. (Original) A system as defined in claim 36 wherein the network medium comprises fiber optic cable.

52. (Currently Amended) A system for detecting the presence of an active connection to a data transmission network, including a network medium, to a computing device, the system comprising:

means for establishing a connection to the network medium;

means for comparing any signal found on the network medium to a predetermined standard; and

means for signaling the computing device when any signal found on the network medium is an active network signal; and

wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

53. (Original) A system as defined in claim 52 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator.

54. (Original) A system as defined in claim 52 wherein the means for comparing any signal found on the network medium to a predetermined standard comprises a first comparator and a second comparator, the first and the second comparators comprising open drain comparators having their outputs connected together.

55. (Previously Presented) A system as defined in claim 52 wherein the means for establishing a connection to the network medium and the means for comparing any signal found on the network medium to a predetermined standard do not significantly load the network medium when connected thereto.

56. (Original) A system as defined in claim 52 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises a output shaping circuit providing an output signal indicating when an active network signal is present on the network medium.

57. (Original) A system as defined in claim 52 wherein the means for signaling the computing device when any signal found on the network medium is an active network signal comprises an output shaping circuit having an RC time constant of about 0.1 ms.

58. (Original) A system as defined in claim 52 wherein the data transmission network complies to an Ethernet network standard.

59. (Original) A system as defined in claim 52 wherein the network medium comprises twisted pair cable.

60. (Original) A system as defined in claim 52 wherein the network medium comprises coaxial cable.

61. (Original) A system as defined in claim 52 wherein the network medium comprises fiber optic cable.

62. (Previously Presented) An apparatus comprising:
a filtering device to receive an input signal from a network medium;
an electrical isolation device to provide electrical isolation from the network medium; and
a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal.

63. (Original) The apparatus of Claim 62, further comprising a reference signal source to provide the reference signal.

64. (Original) The apparatus of Claim 62, wherein the network signal detection device comprises:
logic circuitry to compare the input signal with the reference signal and to indicate a result of the comparison.

65. (Previously Presented) An apparatus comprising:
a filtering device to receive an input signal from a network medium;
an electrical isolation device to provide electrical isolation from the network medium; and
a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal, wherein:
the input signal comprises first and second signals, and
the network signal detection device comprises a first comparator and a second comparator, wherein:
the first comparator comprises logic circuitry to compare the first signal with the reference signal and to provide a comparison at an output terminal of the first comparator,

the second comparator comprises logic circuitry to compare the second signal with the reference signal and to provide a comparison at an output terminal of the second comparator, and the first and the second comparators comprise open drain comparators having output terminals coupled together.

66. (Previously Presented) An apparatus comprising:

a filtering device to receive an input signal from a network medium;
an electrical isolation device to provide electrical isolation from the network medium; and

a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal, wherein the network medium comprises:

a positive signal electrical conductor and a negative signal electrical conductor and wherein the network signal detection device compares the input signal with the reference signal regardless of a connection orientation of the positive signal electrical conductor and the negative signal electrical conductor.

67. (Currently Amended) The apparatus of Claim ~~62~~ 66 further comprising an output shaping device to selectively signal when the input signal is an active network signal in response to the network signal detection device indicating that the input signal is an active network signal.

68. (Previously Presented) A method comprising:

receiving an input signal from a network medium;
providing electrical isolation from the network medium;
comparing the input signal with a predetermined standard; and
selectively signaling when the input signal is an active network signal in response to the comparison between the input signal and the predetermined standard.

69. (Original) The method of Claim 68, wherein the predetermined standard comprises a reference voltage.

70. (Original) The method of Claim 68, wherein the act of receiving comprises making a connection to the network medium without significantly loading the network medium.

71. (Previously Presented) A method comprising:

- receiving an input signal from a network medium;
- providing electrical isolation from the network medium;
- comparing the input signal with a predetermined standard; and
- selectively signaling when the input signal is an active network signal in response to the comparison between the input signal and the predetermined standard, wherein the input signal comprises a differential signal.

72. (Currently Amended) A system comprising:

- a media access controller to perform MAC processing operations; and
- a medium attachment unit to interface communicatively couple a network medium with the media access controller, ~~wherein the medium attachment unit comprises:~~
 - an active network signal detector comprising:
 - a filtering device to receive an input signal from the network medium,
 - an electrical isolation device to provide electrical isolation from the network medium, and
 - a network signal detection device to selectively indicate whether the input signal is an active network signal in response to a comparison with a reference signal.

73. (Currently Amended) The system of claim 72, wherein the ~~transceiver~~ medium attachment unit receives signals from the network medium in compliance with Ethernet.

74. (Currently Amended) The system of Claim 72, wherein the network signal detection device is to indicate whether the input signal is an active network signal ~~transceiver receives signals from the network medium~~ in compliance with PCMCIA.

75. (Currently Amended) The system of Claim 72, wherein the network signal detection device is to indicate whether the input signal is an active network signal ~~transceiver receives signals from the network medium~~ in compliance with ISA.

76. (Currently Amended) The system of Claim 72, wherein the network signal detection device is to indicate whether the input signal is an active network signal ~~transceiver receives signals from the network medium~~ in compliance with RS-232.

77. (Currently Amended) The system of Claim 72, wherein the network signal detection device is to indicate whether the input signal is an active network signal ~~transceiver receives signals from the network medium~~ in compliance with PCI.